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PATENT APPLICATION

ATTORNEY DOCKET NO. 200207057

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Patrick BROUHON

Confirmation No.: 8281

Application No.: 10/686,726

Examiner: Rodriguez, Lennin R.

Filing Date: 10/17/2003

Group Art Unit: 2625

Title: HYBRID PRINTING/POINTING DEVICE

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is an Appeal Brief, a Notice of Appeal, and an Amendment and Reply Accompanying Appeal Brief.

☒ The fee for filing this Appeal Brief is \$510.00 (37 CFR 41.20).

☐ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month
\$120

☐ 2nd Month
\$460

☐ 3rd Month
\$1050

☐ 4th Month
\$1640

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 510. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

☐ A duplicate copy of this transmittal letter is enclosed.

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Respectfully submitted,

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By

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Docket No. 200207057
(F&L Docket No. 084061/0540)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Patrick BROUHON
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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop APPEAL BRIEF - PATENTS

Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

The following is the Appellants' Appeal Brief under the provisions of 37 C.F.R. 41.37.

1. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, L.P., which is the assignee of record.

2. Related Appeals and Interferences

There are no related appeals or interferences that will directly affect, be directly affected by or have a bearing on the present appeal, that are known to Appellants, the Assignee, or the Appellants' patent representative. The Related Proceedings Appendix (Section 11), attached hereto, states "None".

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3. Status of Claims

The present appeal is directed to claims 1, 12, 13, 17 and 18, which are the only claims pending after entry of an Amendment and Reply being filed concurrently with this Appeal Brief (see section 5, below). A copy of the presently pending claims under rejection are attached herein in the Claims Appendix (Section 12). Claims 2-11 and 14-16 are canceled.

4. Status of Amendments

An Amendment and Reply Under 37 C.F.R. 1.116 is being filed concurrently with this Appeal Brief, in order to place the features of claim 16 and its intervening claim 4 into claim 1, whereby claim 1 now has the same scope as claim 16 (which is being canceled). Claim 17 now depends from claim 1, due to the cancellation of claim 16. Other dependent claims have been canceled, to lessen the number of issues for appeal. Thus, this Amendment and Reply should be entered for purposes of appeal.

5. Summary of the Claimed Subject Matter

The present invention is directed to a hybrid printing device for printing on a surface, such as a sheet of paper. As described on page 2, lines 9-11 of the specification, the present invention provides a hybrid printing device that allows printing in a free-form manner and over a wide range of print media formats without the usual mechanical constraints of known printers.

Independent claim 1 recites:

A hybrid printing device for printing on a surface, the device comprising:

- *a printing means adapted to print on the surface; and*
- *a sensing means adapted to sense the position of the printing device in relation to positioning indicia located on the surface, wherein the printing means is further adapted to be responsive to the detected position of the device in relation to the detected position,*
- *wherein the hybrid printing device has a computer mouse form-factor,*
- *wherein the positioning indicia encode data describing absolute or relative positions on the surface, said indicia being optically imaged by the sensing means and thus*

providing an output representing the absolute position of the printing means on the surface, and

- wherein printing on the surface by the printing means is performed based in part on print information provided within the indicia.

Support for the preamble to claim 1 may be found by way of hybrid printing device 10 shown in Figures 1 and 2, and described on page 5, lines 7-10 of the specification.

Support for ‘*a printing means adapted to print on the surface*’ may be found on page 6, line 26 to page 7, line 4 of the specification.

Support for ‘*a sensing means adapted to sense the position of the printing device in relation to positioning indicia located on the surface, wherein the printing means is further adapted to be responsive to the detected position of the device in relation to the detected position*’ may be found on page 6, lines 12-15 and page 8, lines 7-13 of the specification.

Support for ‘*wherein the hybrid printing device has a computer mouse form-factor*’ may be found in Figures 1 and 2 of the drawings, and page 7, lines 21-23 of the specification.

Support for ‘*wherein the positioning indicia encode data describing absolute or relative positions on the surface, said indicia being optically imaged by the sensing means and thus providing an output representing the absolute position of the printing means on the surface*’ may be found on page 8, lines 7-13 and page 8, line 24 to page 9, line 7 of the specification.

Support for ‘*wherein printing on the surface by the printing means is performed based in part on print information provided within the indicia*’ may be found on page 8, lines 14-20 and page 5, lines 14-15 of the specification.

Independent claim 12 recites:

*A method of printing on a surface, the method comprising the steps of:
printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device;*

detecting the absolute position of a printing means housed within the handheld hybrid printing device in relation to the surface by detection of portions of the indicia pattern

situated directly beneath the handheld hybrid printing device, and activating the printing means at designated locations on the surface as a function of the detected position on that surface, to thereby print the actual printing pattern on the surface.

Support for the preamble of claim 12 may be found on page 7, lines 15-23 of the specification.

Support for ‘*printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device*’ may be found on page 7, lines 26-27 of the specification.

Support for ‘*detecting the absolute position of a printing means housed within the handheld hybrid printing device in relation to the surface by detection of portions of the indicia pattern situated directly beneath the handheld hybrid printing device*’ may be found on page 6, lines 12-25 of the specification.

Support for ‘*activating the printing means at designated locations on the surface as a function of the detected position on that surface, to thereby print the actual printing pattern on the surface*’ may be found on page 7, line 24 to page 8, line 6 of the specification.

Dependent claim 17 recites that:

the print information includes information as to which colors to print at a region corresponding to each respective indicia.

Support for the features recited in claim 17 may be found on page 8, lines 15-18 of the specification.

Dependent claim 18 recites similar features to those discussed above for claim 17.

6. Grounds of Rejection to be Reviewed on Appeal

The grounds of rejection to be reviewed on appeal are: (1) whether the Examiner correctly rejected claims 16 and 17 (whereby claim 1 now corresponds to claim 16 written in independent form) under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,312,124 to Desormeaux in view of U.S. Patent No. 5,927,872 to Yamada; (2) whether the Examiner correctly rejected claims 12 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Desormeaux in view of U.S. Patent No. 6,517,266 to Saund; and (3) whether the Examiner correctly rejected claim 13 under 5 U.S.C. § 103(a) as being unpatentable over Desormeaux and Saund and further in view of U.S. Patent No. 5,878,200 to Ichimura.

7. Argument

III. Claim Rejections – Prior Art:

A. Independent Claim 12:

With respect to the rejection of independent claim 12, that claim recites:

printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device;

detecting the absolute position of a printing means housed within the handheld hybrid printing device in relation to the surface by detection of portions of the indicia pattern situated directly beneath the handheld hybrid printing device, and activating the printing means at designated locations on the surface as a function of the detected position on that surface, to thereby print the actual printing pattern on the surface.

In its rejection of claim 12, the final Office Action asserts that element 140 in Figure 1 and column 4, lines 8-31 of Saund teaches printing, with a handheld hybrid printing device, an indicia pattern on a surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device. Applicant respectfully disagrees.

Namely, element 140 in Figure 1 of Saund corresponds to a marking mechanism, whereby column 3, lines 34-36 of Saund describes that the marking mechanism comprises a

print head having a linear array of ink nozzles. Column 4, lines 8-31 of Saund describes that the marking mechanism 140 reproduces the image or a representation of the image on a surface of a whiteboard. A position sensing system 150 determines a position of the marking mechanism 140 relative to the whiteboard, and tracks the marking mechanism 140 as it moves.

There is nothing in this portion of Saund that states that the position sensing system 150 determines the position of the marking mechanism 140 based on marks previously placed onto the whiteboard by the marking mechanism 140. Rather, it appears that a starting position of the marking mechanism on the whiteboard is known, and any movements from that starting position are detected by the position sensing system 150, in order to determine a current position of the marking mechanism 140. See column 5, lines 5-22 of Saund.

This is in stark contrast to the features recited in independent claim 12, in which *an indicia pattern is provided on a surface prior by a handheld hybrid printing device prior to printing an actual printing pattern being made on the surface with the handheld hybrid printing device.*

Accordingly, since Desormeaux does not rectify the above-mentioned deficiencies of Saund, as acknowledged in the final Office Action due to the inclusion of Saund in the rejection of independent claim 12, and since Ichimura (cited against dependent claim 13) also does not rectify these deficiencies of Saund, independent claim 12, as well as dependent claim 13, are patentable over the combined teachings of Desormeaux, Saund and Ichimura.

B. Independent Claim 1:

Furthermore, with respect to the rejection of dependent claim 16, whereby those features (along with the features of intervening claim 4) have been incorporated into presently pending independent claim 1, claim 1 recites that *printing on the surface by the printing means is performed based in part on print information provided within the indicia*. In its rejection of claim 16, the final Office Action asserts that column 6, lines 1-7 of Desormeaux teaches these features. Applicant respectfully disagrees. Namely, column 6, lines 1-7 of Desormeaux describes that as an operator rolls a printer 20 across the skin 24, a controller 40 coordinates firing signals sent to inkjet nozzles of printheads 54, 55 with a position feedback

signal received from an encoder reader 58 to direct the ink droplets to print an image 22 according to instructions on an image cartridge 42, or according to information stored in the controller 40. Thus, unlike the features of claim 16 in which printing is performed based in part on print information provided within an indicia (e.g., a mark provided on a paper sheet), Desormeaux receives position feedback signals provided by a wheels that make up a rotary encoder, as described on page 5, lines 55-67 of Desormeaux, whereby this has nothing at all to do with using information provided within an indicia.

Accordingly, since Yamada does not rectify these deficiencies of Desormeaux, independent claim 1 is patentable over the combined teachings of Desormeaux and Yamada.

C. Dependent Claim 17:

With respect to claim 17, the final Office Action asserts that column 5, lines 8-13 and column 6, lines 1-7 of Desormeaux teaches the features recited in that claim. Applicant respectfully disagrees. Namely, claim 17 recites that *the print information includes information as to which colors to print at a region corresponding to each respective indicia*. Column 5, lines 8-13 of Desormeaux merely describes that multi-color images may be printed, whereby the printing of these multi-color images has nothing at all to do with print information provided on indicia disposed on a paper sheet. Rather, image data from a print memory provides the color information used to print a color image on a paper sheet in the system of Desormeaux. Column 6, lines 1-7 of Desormeaux merely describes that printing is made based on positional feedback signals received from an encoder reader, where again this has nothing at all to do with printing which colors on a location on a paper sheet.

Accordingly, since Saund does not rectify these deficiencies of Desormeaux, claim 17 is patentable over the combined teachings of Desormeaux and Saund.

D. Independent Claim 18:

With respect to claim 18, that claim recites similar features to those discussed above with respect to claim 17, and whereby that claim is also patentable over the combined teachings of Desormeaux and Saund.

8. Conclusion

In view of above, Appellants respectfully solicit the Honorable Board of Patent Appeals and Interferences to reverse the rejections of the pending claims and pass this application on to allowance.

Respectfully submitted,

Date May 13, 2008

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9. CLAIMS APPENDIX

LIST OF THE CLAIMS ON APPEAL (with status identifiers, whereby “Currently Amended” signifies amendments made via an Amendment an Reply filed concurrently with this Appeal Brief)

1. (Currently Amended) A hybrid printing device for printing on a surface, the device comprising:
 - a printing means adapted to print on the surface; and
 - a sensing means adapted to sense the position of the printing device in relation to positioning indicia located on the surface, wherein the printing means is further adapted to be responsive to the detected position of the device in relation to the detected position,
 - wherein the hybrid printing device has a computer mouse form-factor,
 - wherein the positioning indicia encode data describing absolute or relative positions on the surface, said indicia being optically imaged by the sensing means and thus providing an output representing the absolute position of the printing means on the surface, and
 - wherein printing on the surface by the printing means is performed based in part on print information provided within the indicia.

2. – 11. (Canceled).

12. (Previously Presented) A method of printing on a surface, the method comprising the steps of:

printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device;

detecting the absolute position of a printing means housed within the handheld hybrid printing device in relation to the surface by detection of portions of the indicia pattern situated directly beneath the handheld hybrid printing device, and activating the printing means at designated locations on the surface as a function of the detected position on that surface, to thereby print the actual printing pattern on the surface.

13. (Previously Presented) A method of printing on a surface as claimed in claim 12 wherein a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the handheld hybrid printing device over the surface to be interrupted.

14. – 16. (Canceled).

17. (Currently Amended) A hybrid printing device as claimed in claim 1, wherein the print information includes information as to which colors to print at a region corresponding to each respective indicia.

18. (Previously Presented) A method of printing on a surface as claimed in claim 12, further comprising:

detecting print information provided within the indicia pattern,

wherein the print information includes information as to which colors to print at a region corresponding to each respective indicia.

10. **EVIDENCE APPENDIX**

None

11. RELATED PROCEEDINGS APPENDIX

None